EXECUTIVE SUMMARY

This document presents the Engineering Evaluation and Cost Analysis (EE/CA) of a 10-acre portion of a mortar range known as the Former H Range, Camp Edwards. This 10-acre parcel lies within privately owned land, known locally as Camp Goodnews. Science Applications International Corporation (SAIC) prepared this EE/CA Report under contract to American Technologies Incorporated (ATI). ATI is the lead contractor for this project and is supporting the U.S. Army Engineering and Support Center, Huntsville (USAESCH), under Contract No. DACA87-00-D-0035, Delivery Order 0008.

The purpose of the EE/CA is to determine the most appropriate response action to address any ordnance and explosive (OE) risk at the site. The following tasks were completed to achieve this purpose:

- determine the nature and extent of OE residual;
- perform a qualitative risk evaluation of OE hazards present;
- complete an institutional analysis;
- identify, develop, assess, and compare response action alternatives; and
- recommend a removal action alternative.

The Camp Edwards Former H Range is a 55-acre parcel located within Camp Goodnews, Sandwich, Massachusetts. Camp Goodnews, a 183-acre parcel, is private property that abuts a portion of the eastern boundary of the Massachusetts Military Reservation (MMR). The 55-acre portion of the Former H Range includes the 10-acre plot addressed in this report. The 10-acre plot includes the former mortar firing points.

Between 1935 and 1941, the original H Range was constructed on the eastern edge of the J-3 wetland. Specifically, this area was constructed on the eastern edge of Greenway Road, near the intersection of Barlow Road. The range was used throughout the 1940s as a mortar training range where 60 millimeter (mm), 81 mm, and 3-inch Stokes mortars were fired from two firing points, positioned on the eastern side of Greenway Road, at targets within the impact area located to the west within current MMR property. The range was deactivated in the 1950s. Between the 1950s and the early 1960s, the Former H Range was known as the Squad Combat Firing Range. Records indicate that both .30 caliber, 5.56 mm, and 7.62 mm ammunition were used.

As noted above, this EE/CA Report (Volume I) addresses only a 10-acre portion of the 55-acre Former H Range parcel. This EE/CA Report is based on available information about the mortar range.

A separate EE/CA Report (Volume II) will be prepared to address the remaining 45 acres. A meandering path geophysical investigation is planned for the remaining portion of the Former H Range. Volume II also will summarize the recommendations and costs associated with the 10-acre site.

Based on the site conditions, historical information on the mortar range, OE risk impact assessment, and institutional analysis, four alternatives were defined and assessed as to determine the recommended response action. These alternatives included:

Alternative 1: No DOD Action Indicated (NDAI).
Alternative 2: Institutional Controls.
Alternative 3: Surface Clearance of OE with Institutional Controls.
Alternative 4: Surface and Subsurface Clearance of OE with Institutional Controls.

Each of these alternatives was evaluated and compared against the short- and long-term aspects of three broad criteria: (1) effectiveness, (2) implementability, and (3) cost. A ranking system was used to categorize the alternatives and select the recommended response action that maximizes the protection of public health, welfare, and the environment while ensuring the effective use of resources. Based on this assessment, Alternative 4 is the preferred and recommended response action alternative because it would result in the maximum removal of OE items and would significantly reduce residual risk associate with OE hazards at a reasonable cost. The cost of implementing Alternative 4 is $283,016.